

# LIEBHERR

## CONSTRUCTION EQUIPMENT



### LIEBHERR L580 066954-1760 - Diesel Engine

Sample No: LH0243634

Oil Type: LIEBHERR MOTOROIL 5W-30 LOW ASH



#### SAMPLE INFORMATION

Sample Number	LH0243634	LHMC122847	LH0236463	---
Sample Date	17 Aug 2023	22 Jun 2023	26 Aug 2022	---
Machine Hours	1464	0	500	---
Oil Hours	0	0	0	---
Oil Changed	Changed	N/A	Changed	---
Sample Status	NORMAL	ABNORMAL	NORMAL	---

**AMERICAN STATE EQUIPMENT CO.**  
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 US 53227  
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#### OIL CONDITION

Visc @ 100°C	cSt	12.1	12.4	11.8	---
Base Number (BN)	mg KOH/g	6.4	6.6	7.1	---
Oxidation (PA)	%	78	76	202	---

#### Diagnosis

Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.



#### CONTAMINATION

Soot %	%	0.1	0.1	0.1	---
Nitration (PA)	%	77	70	93	---
Sulfation (PA)	%	61	59	112	---
Glycol	%	0.0	NEG	NEG	---
Fuel	%	<1.0	<1.0	<1.0	---
Silicon	ppm	8	8	10	---
Sodium	ppm	2	<1	2	---
Potassium	ppm	1	3	1	---



#### WEAR METALS

Iron	ppm	8	7	8	---
Copper	ppm	316	163	52	---
Lead	ppm	0	0	<1	---
Tin	ppm	0	<1	<1	---
Aluminum	ppm	0	2	2	---
Chromium	ppm	<1	<1	<1	---
Molybdenum	ppm	12	15	38	---
Nickel	ppm	0	0	0	---
Titanium	ppm	60	68	<1	---
Silver	ppm	0	0	0	---
Manganese	ppm	1	<1	2	---
Vanadium	ppm	<1	<1	0	---



#### ADDITIVES

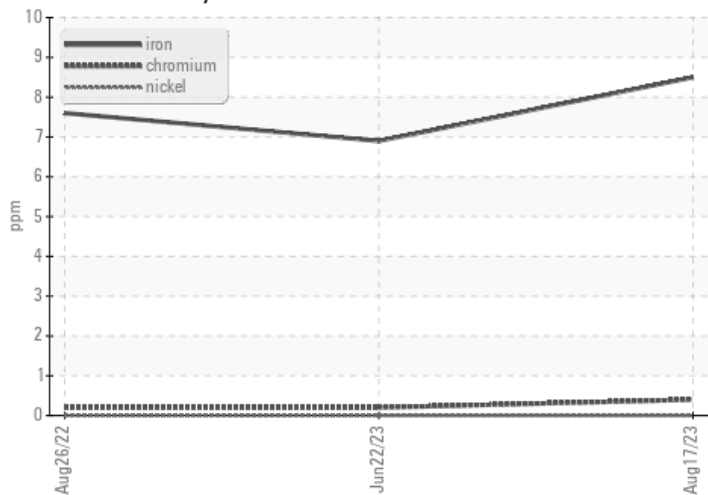
Calcium	ppm	1329	1320	1203	---
Magnesium	ppm	730	662	798	---
Zinc	ppm	1082	1076	805	---
Phosphorus	ppm	873	900	669	---
Barium	ppm	3	0	22	---
Boron	ppm	83	123	109	---

Depot: LEC007  
 Unique No: 10630635  
 Signed: Wes Davis  
 Report Date: 05 Sep 2023

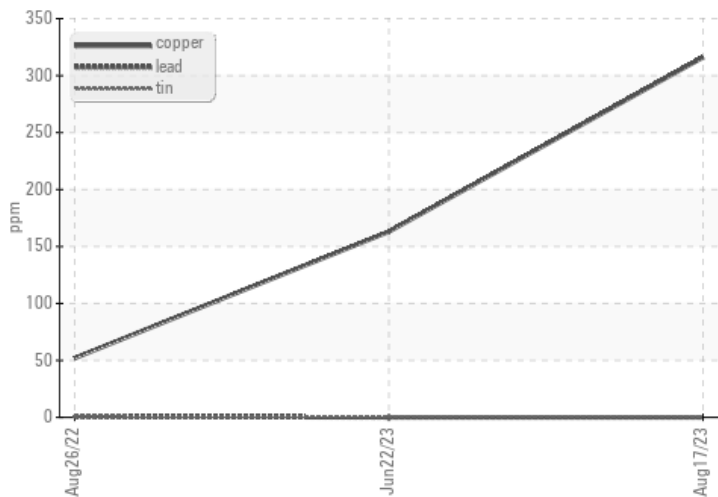


### GRAPHS

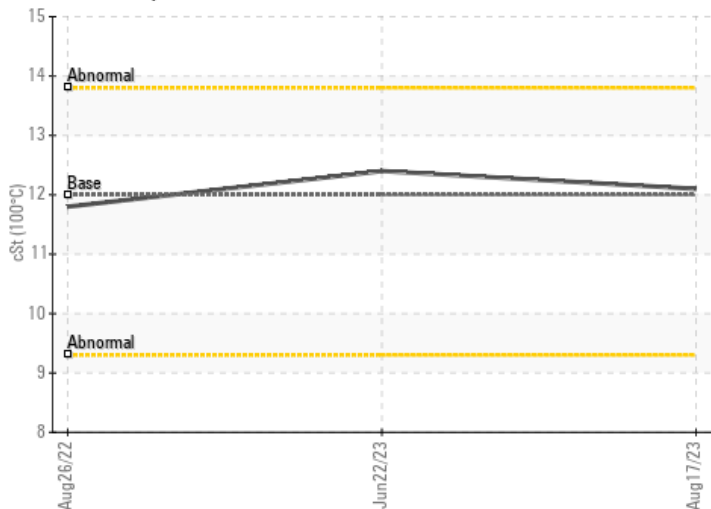
#### Ferrous Alloys



#### Non-ferrous Metals



#### Viscosity @ 100°C



#### Base Number

